

REMARKS

The title has been amended as required by the Examiner. The specification has been amended to correct minor clerical errors, and to add section headings in accordance with US practice. No new matter has been entered.

Claim 1 has been amended to address the 112 rejection and also to better distinguish the claimed invention from the prior art. Support for this amendment is provided throughout the specification. *See, e.g.*, Applicants' Specification at: p. 4, lines 6-10; p. 6, line 21 – p. 7, line 4; p. 16, line 17 – p. 17, line 9; and p. 22, lines 7-15. Claim 6 has been amended to correct a punctuation mark.

Turning now to the rejection of claims 1-6 under 35 U.S.C. § 112, it is submitted that the amendment to Applicants' independent claim 1 renders the rejection moot. The Examiner contends: "The description within the specification does not provide how the direct contact between the anode and cathode would not exhibit a short circuit to the device as would be expected to one of ordinary skill. For the purposes of examination it will be assumed the applicant is using a solid electrolyte forgoing the use of a separator." (Office Action dated April 2, 2009 at page 2, section 4). Independent claim 1, as amended, requires in part: "the cathode contains an electrolyte and is in direct contact with the anode." It is submitted that one having ordinary skill in the art would understand that a "short circuit" between the anode and the cathode of the present invention will not occur because the cathode contains an electrolyte. A person having ordinary skill in the art will understand that the presence of electrolytes permit the exchange of ions from anode to cathode, such that anions may build up at the anode and cations may build up at the cathode, but will not create a short circuit. Support for this contention can be found throughout Applicants' Specification, and particularly at the paragraph bridging pages 16 and 17, which reads:

“To the cathode of the present invention, a conventionally known polymer electrolyte may be added in order to increase ion conductivity. ... Furthermore, since the cathode is in direct contact with the anode in the present invention, it is not preferable that a conventionally known electro-conductivity imparting agent such as acetylene black is contained in large amount in the cathode. The content of the electro-conductivity imparting agent in the cathode is preferably 50% by weight or less, more preferably 40% by weight or less, and most preferably substantially zero. The cathode may contain a conventionally known binder, if necessary.” (underlining added).

Thus, a person having ordinary skill in the art would understand that the presence of electrolyte in the cathode allows for direct contact between the anode and cathode without creating a short circuit. Accordingly, it is respectfully requested that the rejection of claims 1-6 under 35 U.S.C. § 112 be withdrawn.

Turning now to the art rejections, and considering first the rejection of claims 1 and 3-6 under 35 U.S.C. § 102(b) as being anticipated by Nakahara et al. (JP 2002-304996), Applicants’ independent claim 1 requires, in part, “the cathode contains an electrolyte and is in direct contact with the anode.” Nowhere within its four corners does Nakahara et al. teach this feature. Nakahara et al., which is commonly owned by Applicants’ assignee and has some common named inventors as Applicants, is referenced in the present Application. As stated in Applicants’ Specification, Nakahara et al. teaches a power storage device with a separator between a cathode and an anode, and this leads to the problem of dendrite forming on the surface of the anode. *See*, Applicants’ Specification at: page 1, lines 11-15; page 1, lines 21-26. Applicants’ invention overcomes this problem as, “[t]he nitroxyl polymer in contact with a lithium or lithium alloy anode exhibits a catalytic effect on the surface of the lithium or lithium alloy anode, thereby suppressing dendrite growth on the anode surface and improving the cycle property of the power storage device.” *See*, Applicants’ Specification at page 2, lines 18-21. The Examiner cites paragraphs 0045 and 0050 of Nakahara et al. as teaching the use of a solid electrolyte without the use of a separator, however, Nakahara et al. clearly does not teach claim

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1's requirement that "the cathode contains an electrolyte and is in direct contact with the anode." Nakahara et al. fails to teach the features of independent claim 1, and therefore, does not anticipate or render obvious claim 1 or any of claims 2-6 which depend thereupon.

Turning to the rejection of claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Nakahara et al. as applied to claim 1 and further in view of McManis et al. (U.S. Patent 4,632,889), claim 2 is directly dependent upon claim 1. The deficiencies of Nakahara et al. with respect to independent claim 1 are discussed above. Even assuming *arguendo* that McManis et al. is as the Examiner states, no combination of Nakahara et al. with McManis et al. can render obvious independent claim 1 or dependent claim 2.

Turning to the rejection of claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Nakahara et al. as applied to claim 1 and further in view of Inoue et al. (U.S. Patent 6,090,506), claim 3 is directly dependent upon claim 1. The deficiencies of Nakahara et al. with respect to independent claim 1 are discussed above. Even assuming *arguendo* that the Examiner has correctly characterized the teachings of Inoue et al., the combination of Nakahara et al. with Inoue et al. cannot render obvious independent claim 1, nor its dependent claim 3.

Turning to the rejection of claims 3-4 under 35 U.S.C. § 103(a) as being unpatentable over Nakahara et al. as applied to claim 1 and further in view of Farahmandi et al. (U.S. Patent 5,777,428), claims 3-4 are directly dependent upon claim 1. The deficiencies of Nakahara et al. with respect to independent claim 1 are discussed above. Even assuming *arguendo* that the Examiner has correctly characterized the teachings of Farahmandi et al., no combination of Nakahara et al. with Farahmandi et al. can render obvious independent claim 1, nor claims 3-4 which depend thereon.

In response to the Examiner's provisional obviousness double patenting rejection, Applicants are filing a Terminal Disclaimer.

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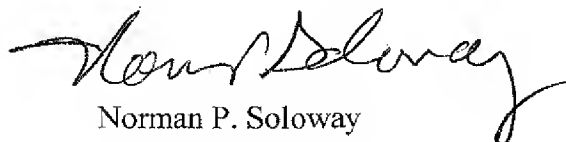
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Having dealt with all the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action is respectfully requested.

Extension and Terminal Disclaimer fees are being paid via EFS WEB in the amount of \$270.00

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account Number 08-1391

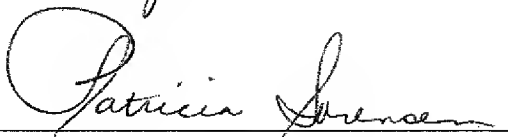
Respectfully submitted,



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CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being deposited with the United States Patent Office via the electronic filing procedure on July 7, 2009.

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